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BREEDS OF SWINE

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F. G. ASHBROOK
Animal Husbandry Division

FARMERS' BULLETIN 765
UNITED STATES DEPARTMENT OF AGRICULTURE

Contribution from the Bureau of Animal Industry
A. D. MELVIN, Chief

Washington, D. C. March, 1917

THERE are two distinct types of swine, the lard and the bacon types. Swine of the lard type far outnumber those of the bacon type in the United States. The lard type is preferred by the people of this country, consequently the majority of feeders produce the rapid fattening, heavily fleshed lard type.

The bacon type is not raised extensively in the United States. The production of choice bacon is more general in those countries where the feed of the hog is more varied and where corn is not relied upon as the principal grain for hogs.

The principal breeds of the lard type are the Poland-China, Berkshire, Chester White, Duroc-Jersey, and Hampshire.

The principal breeds of the bacon type are the Tamworth and the Large Yorkshire.

There is no best breed of swine. Some breeds are superior to others in certain respects, and one breed may be better adapted than another to certain local conditions. This is a matter which the farmer will have to decide for himself. Information concerning the various breeds of swine, their origin, general appearance, development, and adaptability is given in the following pages.

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BREEDS OF SWINE.

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CHOOSING A BREED.

THE question, "Which is the best breed of swine?" can not be answered by naming any one breed. Some breeds are superior to others in certain respects, and one breed may be better adapted than another to certain local conditions. In general, the "best" hog is the one the farmer likes best, provided it is what his market demands. He will not make a mistake, however, if he makes a selection from the breeds already established in his locality. This is a matter which the farmer will have to decide for himself.

After the farmer has decided upon the breed of hogs which he believes to be the best and most profitable for him to raise, he should stick to that breed and endeavor to develop it to its highest possible standard. It is impossible to get the most out of swine breeding by continually changing from one breed to another. There is adequate room, and market, for the different breeds of hogs, but it would not be profitable for one individual to try to raise several and bring them to perfection.

CLASSIFICATION OF SWINE.

There are two distinct types of swine which have been developed by different methods of breeding and feeding for certain market requirements. They are the lard type and the bacon type. Swine of the lard type far outnumber those of the bacon type in the United States. The former is often called the American type of hog, because in this country it has reached its highest development. The people of the United States generally prefer this type of hog for their purposes; consequently the majority of feeders produce the rapid-fattening, heavily fleshed lard type. Corn, which is largely responsible for this type of hog, is deficient in protein and ash, and has a tendency to produce fat at the expense of lean meat.

The bacon breeds of hogs are not raised in very large numbers in the United States. Where corn is not relied upon as the principal grain for hogs, the production of choice bacon is more general than in the corn belt, even though the so-called lard breeds are used. As the markets become more discriminating, breeders will pay more attention to the production of quality, and with the demand for greater excellence in meat the American or "lard" breeds doubtless will be modified to play a large part in its supply.

THE LARD TYPE OF HOG.

The lard hog is low set and compact, with a very wide and deep body. The shoulders should be full, although not coarse, with full hind quarters and hams carried out straight to the root of the tail

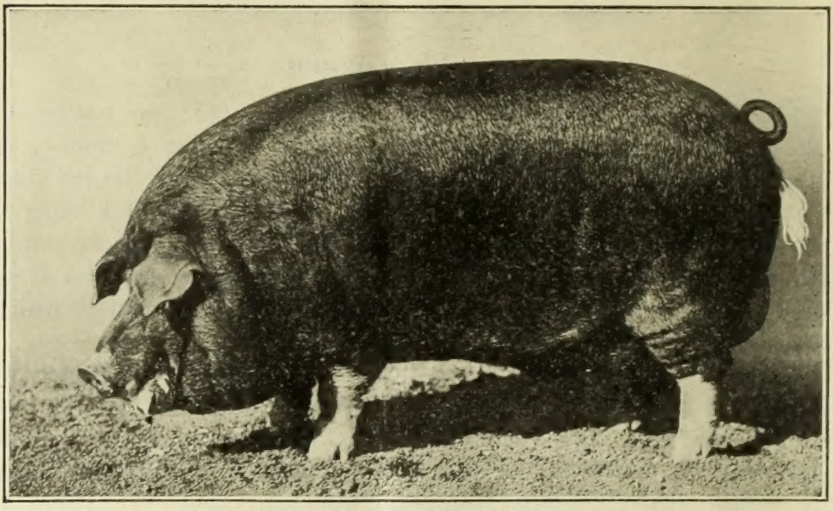

FIG. 1.—Poland-China boar.

and thickly fleshed down to the hock. The flesh should be thick and evenly distributed throughout the body. The size and weight are largely determined by market conditions. Formerly, very heavy hogs were in demand, but at present pigs weighing from 175 to 250 pounds ordinarily command the highest prices. The lard hog does not show the quality and density of bone that prevails in the bacon breeds.

The principal breeds of the lard type are the Poland-China, Berkshire, Chester White, Duroc-Jersey, and Hampshire. Ranked according to their numbers and popularity, the breeds of swine most largely raised in North America in the first decade of the twentieth century are the Poland-China, Berkshire, Duroc-Jersey, and Chester White. Of these, the Berkshire is directly of English origin, while the other three may be termed American breeds.

THE POLAND-CHINA.

The Poland-China hog originated in the Miami Valley in Ohio, chiefly in Warren and Butler Counties. At present there are two distinct types in this breed—the large type Poland-China, which is a large, prolific, heavy-boned animal, and the highly refined quality strain or show-ring type. The aim of many breeders for a number of years has been to develop quality, early maturity, and smoothness of form. Some of them, however, have recognized that this type of Poland-China was being produced at the expense of size and fecundity. The Poland-China of early days was a large, rugged, prolific, spotted hog, and, except for the color, breeders of the large type are simply holding to early standards. They have disregarded the fancy type and are breeding hogs which have size and fecundity.

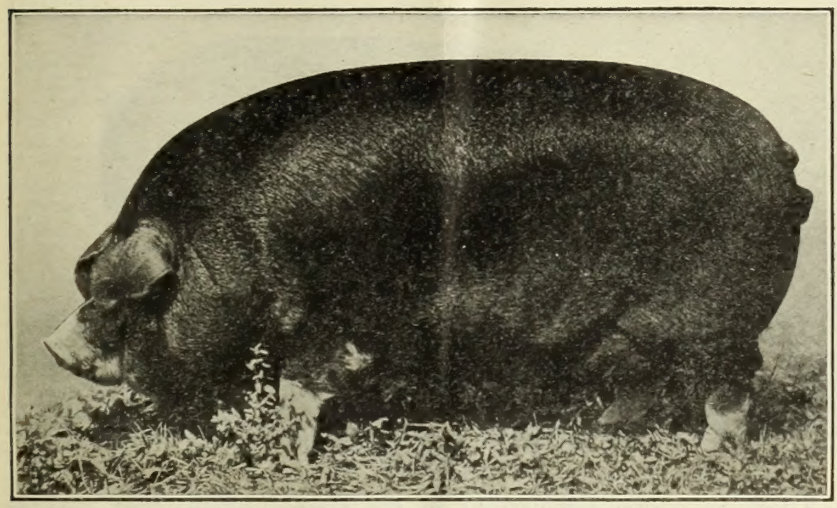

FIG. 2.—Poland-China sow.

The development of more size and bone in the breed is a topic very widely discussed in agricultural papers, and the overrefined type seems to be falling into disfavor with the general farmer.

In general appearance the Poland-China is compact, symmetrical, full and round, smooth, and inclined to massiveness in build. The color is black with six white markings—the face, feet, and tip of tail. The face is practically straight and the ears droop over about one-fourth to one-third from the tip. The body is smooth throughout, with thick, broad, heavy sides, which are somewhat short but very deep. The hind quarter is thickly fleshed, and the hams are very wide and deep, extending well down on the hocks. The legs are short and the bone fine. Poland-Chinas stand remarkably well on their feet. A broken-down pastern is exceptional in this breed.

The Poland-China is not surpassed by any breed in producing a finished carcass at an early age. The meat of the Poland-China finds ready sale on the market, but it has been criticised for carrying too much fat in proportion to lean.

A very marked criticism of this breed is the lack of fecundity. The large-type strains are less deficient in this respect than the fine-boned strains. The Poland-China is admirably adapted for crossing on common stock for grading purposes, and has been successfully used in different sections of the country for a number of years.

Poland-China pigs fed for market may be made to weigh 200 pounds or over at 6 months. At 1 year old males should weigh about 300 pounds, and sows 250 to 275 pounds. In breeding condition at maturity males should weigh about 500 pounds, and sows 400 pounds.

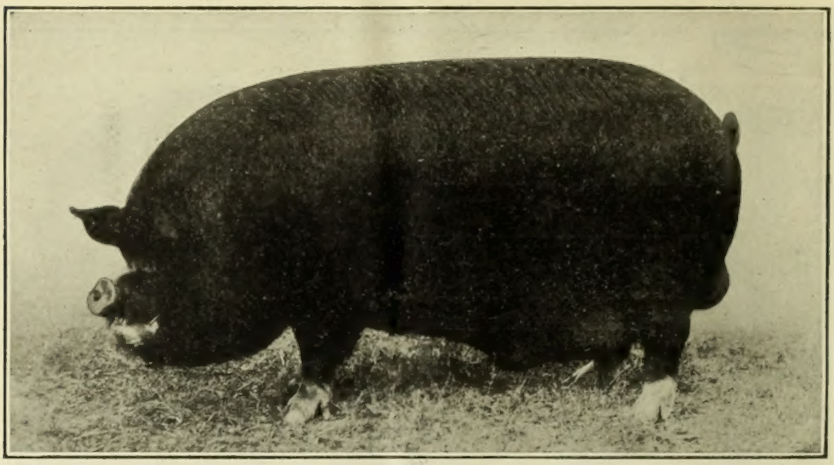

FIG. 3.—Berkshire boar.

There are three associations in the United States that register pure-bred Poland-China hogs: The American Poland-China Record Co., W. M. McFaddan, secretary, Union Stock Yards, Chicago, Ill.; the National Poland-China Record Co., A. M. Brown, secretary, Moorman Block, Winchester, Ind.; the Standard Poland-China Record Association, Ray Davis, secretary, Maryville, Mo.

THE BERKSHIRE.

The Berkshire is one of the oldest of the improved breeds of swine. It was originated and developed in England and was bred there many years before being imported into the United States. The Berkshire is a very attractive animal in appearance and is a little above medium size. The color is similar to the Poland-China, black with white on the feet, face, and tip of tail. An occasional small splash on the foreleg is not regarded as objectionable, although a

large white spot on the jowl, shoulder, or other part of the body is regarded by most breeders as objectionable.

The face is medium in length and sharply dished. The ears are erect or slightly inclined forward. The Berkshire has good width and depth of body. The back is broad with good spring of rib and good thickness through the rump and hams. A common fault is that the tail is not set high enough, the rump sloping too rapidly. Representatives of this breed generally stand well on their feet and possess strong, clean bone.

The Berkshire is well adapted for bacon production, although sometimes the shoulder is too heavy and the side lacks the desired length for prime bacon sides. The early-maturing qualities of this breed are good. Generally the sows are more prolific than the Poland-Chinas and somewhat less so than the Duroc-Jerseys and

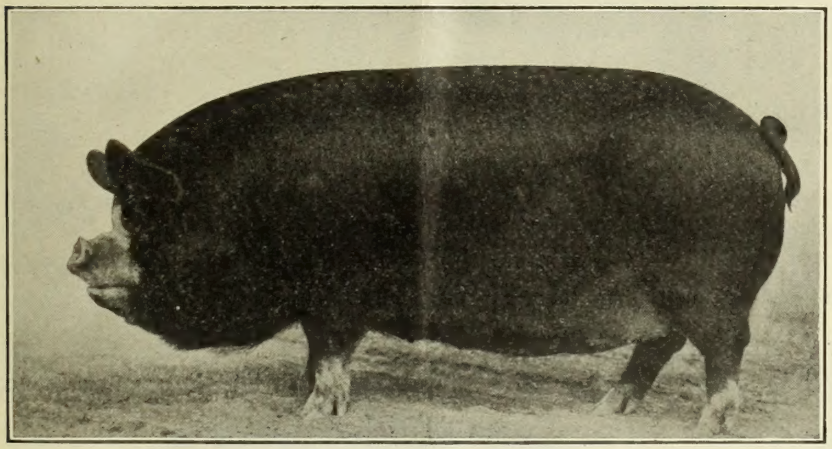

FIG. 4.—Berkshire sow.

Chester Whites. The Berkshire also ranks high as a grazer. The meat of this breed is of prime quality and the lean and fat are well marbled.

The boars are prepotent and impress their characters upon the offspring to a marked degree. Pigs of this breed at 1 year old should readily weigh 300 pounds. In breeding condition mature males should weigh about 500 pounds, and sows 400 pounds.

The secretary of the American Berkshire Association is Frank S. Springer, 510 East Monroe Street, Springfield, Ill.

THE DUROC-JERSEY.

The Duroc-Jersey swine were first bred in New Jersey and other Atlantic States. This breed from its early days has been noted for docility, fecundity, and hardiness. During the last two decades the breed has been improved in quality, ease of feeding, and early

maturity, and is now held in about equal favor with the Poland-China in the leading pork-producing areas of the United States. Although the Duroc-Jersey may not produce as high a quality of

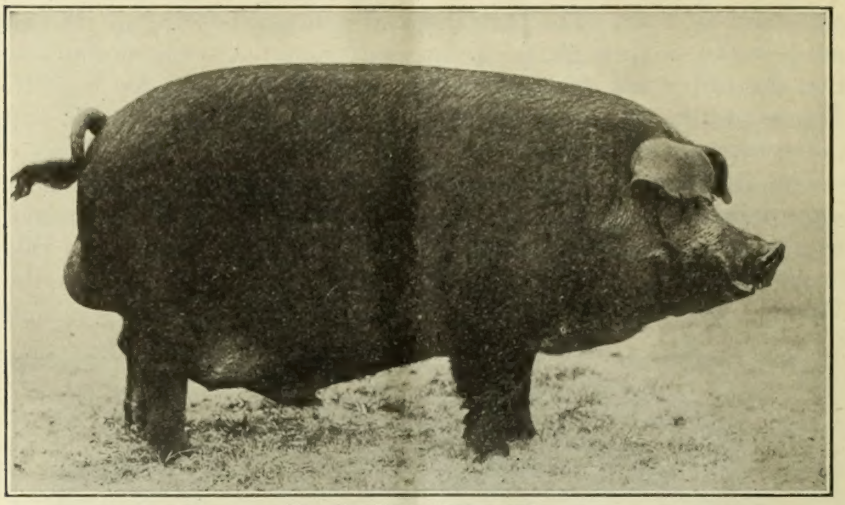

FIG. 5.—Duroc-Jersey boar.

pork as some other breeds, there is no apparent discrimination against it on the market.

The Duroc-Jersey is similar to the Poland-China in size and conformation; in fact it has often been called facetiously "a red Poland-

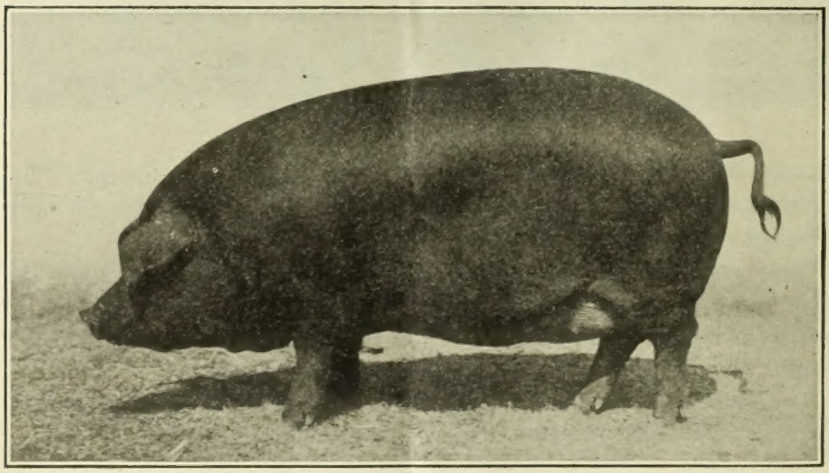

FIG. 6.—Duroc-Jersey sow.

China." The ears break one-fourth to one-third from the tip, the face is slightly dished, the snout is of medium length, and the shoulders and hams are heavily fleshed. The legs are short and the bone is good. Cherry red is the popular color, but as the hogs grow older the shade becomes darker. Sandy red is objected to by most breeders.

Duroc-Jersey sows are more prolific than Poland-Chinas or Berkshires, and they are also conceded to be better milkers and mothers. The Duroc-Jersey is also one of the best grazers and is especially adapted to following cattle in the feed lot. As an early maturing hog it ranks high, and crosses well with other breeds, but the Berkshire and Poland-China crosses seem to be the most popular. At maturity a boar should weigh about 600 pounds, a sow 500 pounds.

The secretary of the American Duroc-Jersey Breeders' Association is Robert J. Evans, Union Stock Yards, Chicago, Ill.; the secretary of the National Duroc-Jersey Record Association is J. R. Pfander, Peoria, Ill.

FIG. 7.—Chester White boar.

THE CHESTER WHITE.

The Chester White hog originated early in the nineteenth century in Chester County, Pa. The breed is now widely distributed in the United States. It is popular in the East, and is strongly represented in Ohio, Illinois, Indiana, Iowa, Michigan, and Pennsylvania.

The Chester White is moderately long, thick, and deep, possessing strong bone, but somewhat loosely coupled. The original Chester Whites were dished slightly in the face, but the dish has disappeared and the present-day animals possess straight faces with rather long snouts. The ears droop about one-third the distance from the base.

In conformation the Chester White is long but not so deep in body as the Poland-China. The legs are short but some individuals may lack strength in the pasterns. The color is white and the hair has a tendency to be wavy. Black and bluish spots on the skin are not uncommon, but breeders aim to prevent them as much as possible.

The sows rank high in point of fecundity, and are exceptionally good mothers and milkers. The Chester White crosses well with almost any breed, but to obtain the best results they should be crossed on pigs possessing superior bone and feet. As a feeder the Chester White ranks high and the quality of its flesh is good. Mature males in fair flesh weigh 600 pounds, and sows about 450 pounds.

There were at least eight associations for recording Chester Whites a few years ago, but they are now reduced to two, namely: The Chester White Swine Record Association, secretary, F. F. Moore, Rochester, Ind.; and the O. I. C. [Ohio Improved Chester] Swine Breeders' Association, secretary, O. C. Vernon, Goshen, Ind.

FIG. 8.—Chester White sow.

THE HAMPSHIRE.

The Hampshire originated in the English county of the same name, and was introduced into the United States during the first half of the last century. This breed is sometimes classed between the fat or lard hog and the bacon type, but most breeders consider it as belonging in the former class. The Hampshire has made rapid progress of late years, but in comparison with the older-established breeds the number in any one State is not large, owing to the fact that the breed has only recently come into prominence.

The most characteristic feature of the Hampshire is the white belt around its body, including the shoulder and front legs, while the rest of the body is black, some individuals being entirely black. The most popular color, however, consists of black with a white belt from 4 to 12 inches wide encircling the body and including the forelegs.

The Hampshire in general appearance is rather upstanding on legs that are fine-boned but of good quality and strong, with strong

and upright pasterns. The body is not very broad, but deep; the jowls are light, the head small, the snout rather straight and medium in length. The head is narrow, the ears set close and extend-

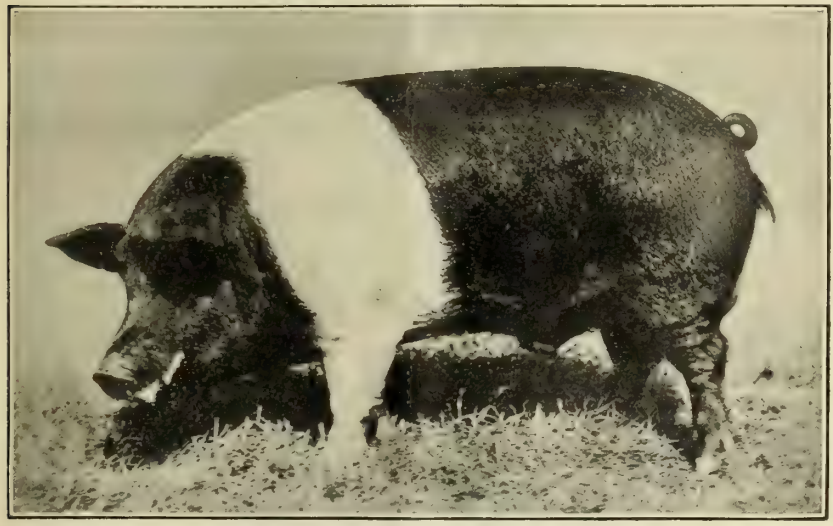

FIG. 9.—Hampshire boar.

ing forward, but not breaking. The shoulders are smooth and well set, the back is strong and arched, the hams are deep and broad, but not very thick. In quality the flesh of the Hampshire has a very

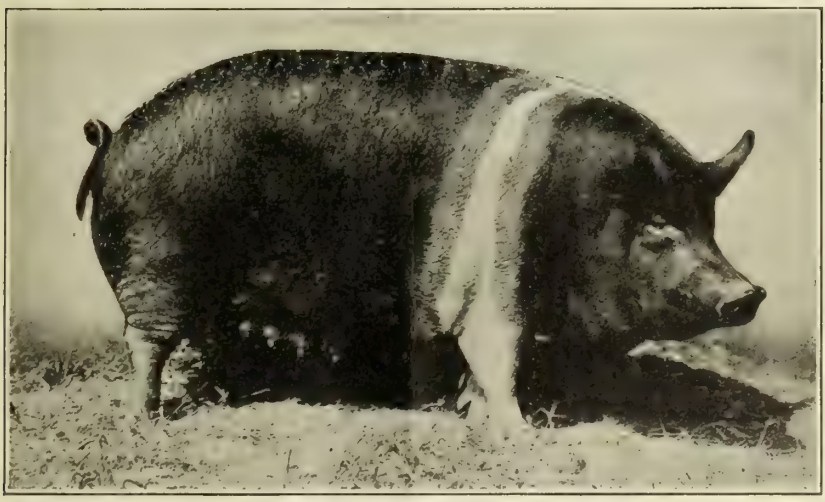

FIG. 10.—Hampshire sow.

high reputation. It has made a good record in the dressed-carcass competition at the International Live Stock Exposition at Chicago. The flesh is of good grain with a desirable percentage of lean to fat.

The Hampshire possesses good early maturing and feeding qualities, and the sows are prolific; the breed is also a good grazer. Owing to the fact that the Hampshire has only recently come into prominence, its value for crossbreeding is not well known, but it seems reasonable to suppose that it should cross well with fat types of hogs. In breeding condition mature males should weigh 500 pounds, mature sows about 400 pounds.

The secretary of the American Hampshire Record Association is E. C. Stone, 703 East Nebraska Avenue, Peoria, Ill.

THE BACON TYPE OF HOG.

In conformation the bacon type of hog is very different from the lard type, being longer in leg and body, with less width of back, and lighter in the shoulders and neck. On first sight this type is lean and lanky in appearance. The spring of rib in a bacon hog is very characteristic. The side of the hog is used for the production of

FIG. 11.—Tamworth boar.

bacon; hence much emphasis is laid on the development of the side. The bacon hog possesses great length and depth of body and is very smooth throughout. Large, heavy hams are not desirable on the bacon hog; the hams should be smooth and taper toward the hock.

The Tamworth and the Yorkshire breeds are both of British origin and are recognized as being especially suitable for bacon production.

THE TAMWORTH.

Of all breeds the Tamworth is probably the purest. There is no evidence of its having been crossed with any other breed. In general outline the Tamworth is long, smooth, and fairly deep, having a moderately light fore end and deep ham. The snout is rather long and pointed, the neck is light and muscular, the jowls are light, the ears are large and usually upright, but often inclined forward. Al-

though the legs of the Tamworth are long, they are strong and the pasterns erect.

The color is red, varying from light to dark. A "golden-red hair on a flesh-colored skin, free from black," is preferred. Tamworth pigs do not mature early. The bacon is of exceptionally fine quality, well mixed with lean, and fine grained. The Tamworths are good rustlers. The sows are more prolific than those of the lard breeds, and the boars are very prepotent. A mature boar in good condition should weigh about 650 pounds and a sow 600 pounds. Many individuals weigh more.

The secretary of the American Tamworth Swine Record Association is E. N. Ball, Hamburg, Mich.

THE LARGE YORKSHIRE.

The Yorkshire is a white breed of English origin. Black spots on the skin do not disqualify, but the aim of the breeder should be to

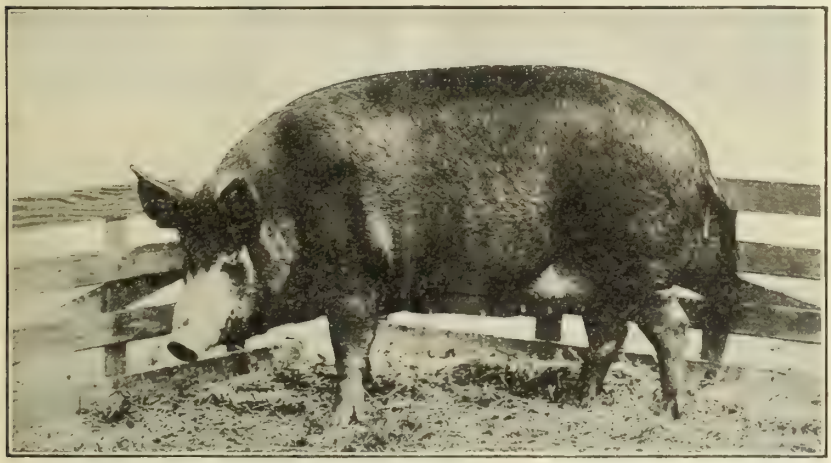

FIG. 12.—Tamworth sow.

reduce them to a minimum. The presence of black hairs is regarded by authorities as sufficient to justify disqualification.

The conformation is typical of the bacon hog in general; that is, upstanding, comparatively narrow, deep, and long, with light shoulders and hams. The back is slightly arched and the ribs well sprung. The underline and sides are trim, straight, and level. The body is supported by well-placed legs of medium length. In Denmark, England, Ireland, and Canada, where the raising of pigs for bacon is an important industry, the Large Yorkshire with its crosses is the most common breed used.

The Large Yorkshire boar is very valuable for crossing upon breeds which are fine in bone and lacking in size and fecundity.

Large Yorkshire sows make good mothers, and the boars are exceptionally prepotent. A mature boar in good condition should weigh not less than 700 pounds and a mature sow 600 pounds.

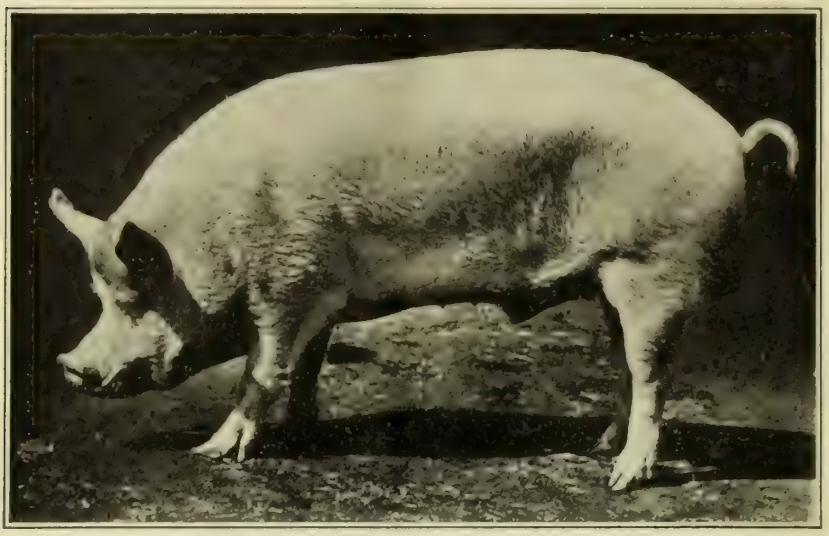

FIG. 13.—Yorkshire boar.

The secretary of the American Yorkshire Club is Harry G. Krum, White Bear Lake, Minn.

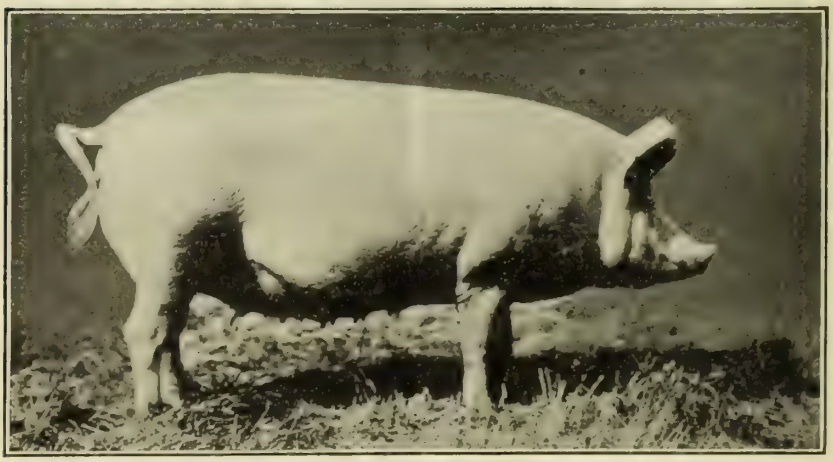

FIG. 14.—Yorkshire sow.

MINOR BREEDS OF HOGS.

Besides the breeds that have been discussed there are others, such as the Mule-foot, Cheshire, Essex, Small Yorkshire, Victoria, and Large Black, which have not been bred to any great extent in the United States and are not numerous.

THE MULE-FOOT HOG.

The Mule-foot, or solid-hoofed, hog is not numerous nor widely distributed in the United States. Its characteristic peculiarity is the solid hoof. The breed, however, is growing in favor in some sections. The claim made that Mule-foot pigs are immune to hog cholera is not justified by experience.

There are three associations which have been organized to handle the registration and pedigrees of the Mule-foot hog: The National Mule-foot Hog Association, G. C. Kreglow, secretary, Degraff, Ohio; the Mule-foot Hog Breeders' Association, D. D. Gilson, president, Mammoth Springs, Ark.; the American Mule-foot Hog Record Co., R. E. Pfeiffer, secretary, 507 Chamber of Commerce, Columbus, Ohio.

THE CHESHIRE.

The native home of this breed is Jefferson County, N. Y., on the eastern shore of Lake Ontario. In general conformation this breed ranks intermediate between the lard type and the bacon type. The color is white, the head of medium length, the face slightly dished; the ears are small, fine, and stand erect. The body is of medium width, depth, and length.

The general quality of the meat is unexcelled. The lean and fat are well mixed and the meat well marbled. The sows are fairly prolific and the boars prepotent.

The secretary of the Cheshire Swine Breeders' Association is E. S. Hill, Freeville, N. Y.

THE ESSEX.

This breed was developed in Essex County, England, where there formerly existed a rather small, flat-ribbed, slow-maturing hog of a nervous disposition. In England the Essex is often spoken of as the small Black or Black Suffolk. The Essex belongs to the small breeds, being smaller than the Berkshire or the Poland-China. The color is entirely black, no white being admissible. The head is short, the face slightly dished, while the ears are small, fine, and carried erect. The Essex is a short, thick, deep, chunky type of pig, with short, fine-boned legs. The meat is fine and of good flavor, but possesses a tendency to excessive fatness. The lack of size prevents this breed from becoming popular with the average farmer.

The secretary of the American Essex Swine Association is F. M. Srout, Box 141, Annawan, Ill.

THE SMALL YORKSHIRE.

The Small Yorkshire comes from England, where it is known as the Small White, the name Small Yorkshire being of American origin. This is the smallest breed in the United States.

The head is remarkable. The snout is very short and turned-up, the face is wide and small, the ears erect, the jowl heavy, and the neck very short. The body is short, thick, and deep, and the bone is very fine in quality. The color is white, and the hair abundant and fine.

The Small Yorkshire is but slightly bred to-day, either in England or America. There are some small herds in the eastern United States, in New York, Massachusetts, and Pennsylvania.

The American Yorkshire Club registers both Large and Small Yorkshires in the United States. The secretary is H. G. Krum, White Bear Lake, Minn.

THE VICTORIA.

The breed which is known today as the Victoria was originated by George F. Davis, of Indiana, and Col. F. D. Curtis, of New York. The Victoria is a white hog of medium size. It has a rather short head and a medium-dished face, ears small and carried erect, shoulders and hams thick and full, with good length and depth of side. The quality of the meat ranks high; the breeding qualities are also good. The breed is not growing in public favor.

THE LARGE BLACK.

The origin of this breed of swine is not well known, but it has been bred for a great many years in England. It is not common in the United States. The breed is large, coarse, and all black in color, with very large, drooping ears. In general conformation it approaches the bacon type of hog. In England the main claims made for the Large Black are its bacon qualities. However, at the Ottawa agricultural experimental station in Canada it was found that the bacon of this breed was not equal to that of the Large Yorkshire or of the Tamworth.

The Large Black is considered a first-class breed for farmers in England. The sows are prolific and excellent mothers.

The secretary-treasurer of the American Large Black Pig Society is J. F. Cook, Lexington, Ky.

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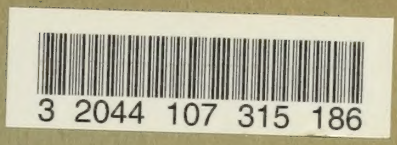
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